Approved for use through 03/31/2007. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control

number.	Substitute for fo	orm 1449/I	РТО	Complete if Known			
	INFORMATION	DISCLO	SURE	Application Number	10/531,176		
STATEMENT BY APPLICANT				Filing Date	7/25/2003		
				First Named Inventor	Kyoko MIURA		
	Date Submitted	: May 14	, 2007	Art Unit	1609		
(use as many sheets as necessary)			cessary)	Examiner Name	BLAND, LAYLA D		
Sheet	1	of	1	Attorney Docket Number	016912-0211		

	U.S. PATENT DOCUMENTS								
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				
Initials*	No.1	Number-Kind Code <sup>2</sup> (if known)	MM-DD-YYYY	Cited Document					

			FOREIGN PATENT D	OCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (If known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Documents	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
						<del> </del>
					<u> </u>	+

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
/L.B.	/ <sup>A1</sup>	GIOVANNI NICOLOSI ET AL., "Enzymatic procedure catalysed by lipase from Candida Antarctica for the regioprotection – deprotection of glucosamine", Tetrahedron: Asymmetry 10 (1999), pgs. 2891-2897	
/L.B./	A2	JON K. FAIRWEATHER ET AL., "The Asymmetric dihydroxylation of Some Alkenyl 2-Acetylamino-2-deoxy- β-p-glucopyranosides: the Preparation of Optically Pure Epoxides as Putative Inhibitors of Chitinases", Aust. J. Chem. (1998), Vol. 51 No. 6, pgs. 471-482	
	Ì		l

	<del>,</del>		
Examiner Signature	/Layla Bland/	Date Considered	08/02/2007

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant: 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. 1450, Alexandria, VA 22313-1450.

JC12 Rec'd PCT/PTC 1 1 APR 200 MODIFIED PTO/SB/08 (08-00) Approve se through 10/31/2002. OMB 0651-0031

Approve U.S. Patent and Trademark 

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control

	Substitute for	form 1449B	/PTO	Complete if Knovn() / 5 3 1 1 7 6			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	Unassigned		
				Filing Date	04/11/2005		
	D-4- O-1		2005	First Named Inventor	Kyoko MIURA		
Date Submitted: April 11, 2005				Group Art Unit	Unassigned		
4	(use as many st	neets as ne	cessary)	Examiner Name	Unassigned		
Sheet	1	of	1	Attorney Docket Number	016912-0211		

U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	U.S. Patent Document			Date of Publication of	Pages, Columns, Lines, Where Relevant	
		Number	Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear	
	A1	5,696,246		SCHMIDT et al.	12-09-1997		

Examiner Initials*	Cite				Name of Patentee or	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant	
	No. <sup>1</sup>	Office	3 Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)	Applicant of Cited Documents	MM-DD-YYYY	Passages or Relevant Figures Appear	Т
/I B /	A2	JP	62-36306	A	TAIYO KAGAKU KK	02-17-1987		
/L B./.	A3	JP	2-243611	Α	KOBAYASHI KOSE CO.	09-27-1990		L
7/ BY	A4	JP	2001-2551	Α	KANEBO LTD.	01-09-2001		1_
/L.B./	A5	EP	1 075 836	A2	YAIZU SUISANKAGAKU INDUSTRY CO., LTD.	02-14-2001		
/L.B./	A6	JP	8-143588	A	KOSE CORP.	06-04-1996		+
								+
								1

		NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*						
/L.B.	A7 /	SHINGO SAKAI et al., "Hyohi Saibo Hyaluronic-san Sansei Sokushin Sayo o Matsu Ten'nengata N-Acetylglucosamine", Fine Chemical, December 15, 2001, pages 5-11, Vol. 30, No. 22.				

Examiner Signature	/Layla Bland/	Date Considered	08/02/2007

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

¹ Unique citation designation number. ¹See attached Kinds of U.S. Patent Documents. ¹Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¹For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ¹Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁴Applicant is to place a check mark here if English language Translation is attached.

MODIFIED PTO/SB/08 (08-00) se through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Omce: U.S. DEPARTMENT OF COMMERCE Approve

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control

umber. Substitute for form 1449B/PTO		Complete if Known	OIPA
-	Application Number	10/531,176	
INFORMATION DISCLOSURE	Filing Date	4/11/2005	100 1 2000 5
STATEMENT BY APPLICANT	First Named Inventor	Kyoko MIURA	JUL 1 1 2005 🕃
Date Submitted: July 11, 2005	Group Art Unit	Unassigned	(E)
	Examiner Name	Unassigned	
(use as many sheets as necessary) Sheet 1 of 1	Attorney Docket Number	016912-0211	PADFMARKS

				U.S. PATENT DOCUMENTS		Pages, Columns, Lines,
<del>                                     </del>		U.S. Patent	Document	at Batanton or Applicant of	Date of Publication of Cited Document	Where Relevant Passages or Relevant
Examiner Cite No.1		Number	Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	MM-DD-YYYY	Figures Appear
	<del>  -</del>					
	<del> </del>					

					FC	REIGN PATENT DOCUMEN	Date of Publication of 1	Pages, Columns, Lines, Where Relevant	
xaminer nitials*	Cite No.1	Fore Office <sup>3</sup>	oign Patent D Number <sup>4</sup>	ocument Kind Co	ode"	Name of Patentee or Applicant of Cited Documents	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear	1
									+-
		<del> </del>							+
		<del>  -</del>							1
		<del> </del>					<del> </del>		

	_	NON PATENT LITERATURE DOCUMENTS	T T
Examiner	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
/L.B	A1	Shingo SAKAI et al., "Metabolism of Hyaluronic Acid and Wrinkle Formation", Fragrance Journal, April 15, 1998, pp. 49-58, Vol. 26, No. 4, Fragrance Journal Ltd.	Abstr.
	 A2	BIO INDUSTRY, CMC Co., Ltd., May 1, 1991, pp. 66(346)-68(348), Vol. 8, No. 5.	
/L.B.		Ludger J.M. MEYER et al., "AGE-DEPENDENT CHANGES OF HYALURONAN IN HUMAN SKIN",	
/L.B./	A3	The Journal of Investigative Dermatology, April 13, 1997, Pp. 1997	
/L.B./	A4	Takuo TSUJI, "PHYSIOLOGICAL AGING OF SKIN: DIFFERENCE FROM PHOTOAGING", Clinical Dermatology, Igaku-Shoin Ltd., Special Edition, April 15, 1997, pp. 53-57, Vol. 51, No. 5.	

Examiner	/Layla Bland/	Date Con	e nsidered	08/02/2007	
Signature	7Eayla Diano	and station in in conformance with MPEP 609. Draw	conformance with MPEP 609. Draw line through citation if not in conformance and not		

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.